

- Guidelines for the management of cardiac surgery patients recommend perioperative administration of beta-blockers to prevent and treat postoperative atrial fibrillation (POAF), but the effectiveness and safety of this has not been definitively determined.
- This meta-analysis included six trials published before December 1, 2013 that compared perioperative landiolol administration in cardiac surgery patients with a control group (saline administration, no drug administration, or other treatment), including 560 patients who underwent coronary artery bypass grafting (CABG) or valvular surgery.
- The incidence of POAF was significantly lower in patients who received landiolol than in control group patients for the group overall, and in subgroups of patients who underwent CABG, patients who underwent CABG and were compared with a control group who received saline or nothing, and all patients who underwent cardiac surgery and were compared with a control group who received saline or nothing.
- Safety analysis found that only two patients developed adverse events, including one case of hypotension and one case of exacerbation of asthma.
- The findings indicate that landiolol administration is safe and effective for the prevention of POAF in patients undergoing cardiac surgery, but further investigation is required to determine the effects of landiolol administration on prognosis and other outcomes, and the optimal type and dose of beta-blocker administration in cardiac surgery patients.

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